

BODY-WORN ALERT SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present Application for Patent claims priority to U.S. Provisional Application No. 63/026,672 entitled "BODY-WORN ALERT SYSTEM" filed 18 May 2020, which is hereby expressly incorporated by reference herein.

BACKGROUND

1. Technical Field

[0002] The present subject matter is related, in general, to a child monitoring system for use by parents or guardians, and more particularly, but not exclusively to a method and a system for detecting one or more activities being performed by a child and any threats associated with such activities.

2. Description of the Related Art

[0003] In recent years, healthy parenting has been a major issue faced by parents residing globally. Furthermore, activities such as smoking, drinking, vaping and so forth have severely affected the health of the youth and teenagers. Additionally, careless activities such as unsafe driving, carrying passengers in personal cars without permission, and such like activities are prone to hazardous situations and may result in accidents or health issues. Therefore, there is a need to protect the child from performing the aforementioned activities.

[0004] A number of child monitoring devices have been devised for maintaining surveillance on children, for example, who wander from a particular area or domain. It has become increasingly difficult for parents and/or guardians to monitor a single child or groups of children by human effort alone. The increase of lost children in shopping malls, play areas, or area kidnappings, within the United States alone has been cause for developing auxiliary measures or devices for parents or guardians to detect and retrieve children who have left a particular area. The advent of these devices began with the rudimentary methods of announcing over a loudspeaker, particularly in shopping malls, that a child has been found and is at a particular location for pickup by a parent or guardian.

[0005] In recent years, several advancements have been made to monitor day-to-day activities of children either in schools or on roads. Such practices include smoke sensors in washrooms or corner areas, cameras on the campus, and so forth. However, such practices are still inefficient in controlling the activities of the child such as skipping school, performing unhealthy or unsafe activities when away from guidance. Therefore, several devices have been introduced for real-time monitoring of the child. In such a case, the monitoring devices are placed in proximity of the child to obtain real-time monitoring data. However, there are limitations with such devices as the devices are unable to avoid or discourage the child from performing such activities, due to their evident appearance on a person.

[0006] Parents may have difficulty keeping track of their children in a crowded public place. Children may not be old enough to use a mobile device, such as a cell phone, for communicating with their parents. Thus, the parent must constantly monitor the child in order to prevent the child

from becoming lost. However, it can be difficult or impossible for a parent to monitor a child at all times. Thus, a wearable device that allows a parent and a child to remain in contact and that allows the parent to monitor the child's activity and location is desired.

[0007] None of the state-of-the-art child monitoring systems, taken either singly or in combination, is seen to describe the present invention as claimed. Thus, a child monitoring system that detects activities of a child using sensors and alerts the parent when the child is performing a harmful activity such as, drinking, smoking, vaping, and like or if the child is in a dangerous situation is desired. Further, a child monitoring system is desired that can communicate with the child and discourage the child from performing such harmful activities.

[0008] Further limitations and disadvantages of conventional and traditional approaches will become apparent to one of skill in the art, through comparison of described systems with some aspects of the present disclosure, as set forth in the remainder of the present application and with reference to the drawings.

BRIEF SUMMARY OF THE INVENTION

[0009] The foregoing summary is illustrative only and is not intended to be in any way limiting. In addition to the illustrative aspects, embodiments, and features described above, further aspects, embodiments, and features will become apparent by reference to the drawings and the following detailed description.

[0010] According to embodiments illustrated herein, there may be provided an automated monitoring system for monitoring activities of a child or other person of interest. The automated child monitoring system may comprise an inconspicuous, wearable device and a remote device. The wearable device may comprise a hardware processor and a memory communicatively coupled to the hardware processor. The wearable device may further comprise a speaker configured to play an audio received from a remote device via a transceiver. The wearable device may further comprise a microphone configured to record audio within a predefined distance of a child. In an embodiment, the wearable device is wearable by the child. The wearable device may further comprise one or more sensors configured to detect one or more activities of the child. In an embodiment, the one or more activities comprises at least one of: drinking, vaping, smoking, a presence of a threat for the child.

[0011] The wearable device may further comprise a GPS unit configured to determine real-time location of the child. In an embodiment, the remote device is communicably coupled to the inconspicuous wearable device. In an embodiment, the remote device is configured to control one or more operations of the inconspicuous wearable device. In an embodiment, the remote device is configured to generate a real-time report of the child's activities and further provide one or more alarms to a user of the remote device.

[0012] According to one or more embodiments illustrated herein, there may be provided a method for monitoring an activity of a child. The method may be performed by an automated child monitoring system. The method may include detecting one or more activities of the child using one or more sensors. In an embodiment, the one or more sensors comprises temperature sensor, blood pressure sensor, smoke sensor, proximity sensor, noise sensor, and